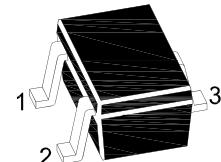
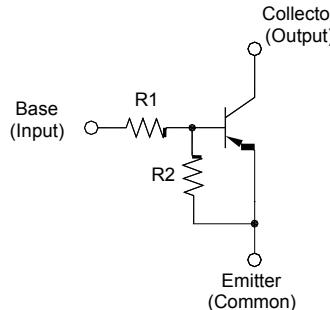


PNP Silicon Epitaxial Planar Digital Transistor

Features

- With built-in bias resistors
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process



1. Base 2. Emitter 3. Collector
SOT-523 Plastic Package

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Collector Emitter Voltage	$-V_{CEO}$	50	V
Input Voltage	V_I	- 40 to + 6	V
Collector Current	$-I_C$	100	mA
Total Power Dissipation	P_{tot}	150	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $-V_{CE} = 5 \text{ V}$, $-I_C = 5 \text{ mA}$	h_{FE}	68	-	-	-
Collector Base Cutoff Current at $-V_{CB} = 50 \text{ V}$	$-I_{CBO}$	-	-	0.5	μA
Emitter Base Cutoff Current at $-V_{EB} = 5 \text{ V}$	$-I_{EBO}$	-	-	0.88	mA
Collector Emitter Saturation Voltage at $-I_C = 5 \text{ mA}$, $-I_B = 0.25 \text{ mA}$	$-V_{CE(sat)}$	-	-	0.3	V
Input off Voltage at $-V_{CE} = 5 \text{ V}$, $-I_C = 100 \mu\text{A}$	$-V_{I(off)}$	0.3	-	-	V
Input on Voltage at $-V_{CE} = 0.3 \text{ V}$, $-I_C = 1 \text{ mA}$	$-V_{I(on)}$	-	-	1.4	V
Transition Frequency at $-V_{CE} = 10 \text{ V}$, $I_E = 5 \text{ mA}$, $f = 100 \text{ MHz}$	f_T	-	250	-	MHz
Input Resistance	R1	7	10	13	$\text{k}\Omega$
Resistance Ratio	R2 / R1	3.7	4.7	5.7	-

